

IN THE CLAIMS:

Please cancel claims 2, 6, 13, and 17 without prejudice, and amend claims 1, 5, 9, 12, 16, and 20 as follows:

1. (Currently Amended) A write and/or erase method for a storage apparatus which writes and/or erases information by irradiating a light beam with respect to a target track on a recording medium, comprising the steps of:

(a) setting a write and/or erase power of the light beam with respect to the target track; and

(b) setting a write and/or erase slice level that is used to detect an off-track of the light beam with respect to the target track depending on the write and/or erase power,

wherein said step (b) decreases the write and/or erase slice level depending on an increase of the write and/or erase power or, increases the write and/or erase slice level depending on a decrease of the write and/or erase power.

2. (Cancelled)

3. (Previously Presented) The write and/or erase method as claimed in claim 1, wherein said step (b) also sets an off-track detection time constant depending on the write and/or erase power.

4. (Previously Presented) The write and/or erase method as claimed in claim 1, wherein said step (b) also sets a shock detection time constant that is used to detect an external vibration or shock depending on the write and/or erase power.

5. (Currently Amended) A write and/or erase method for a storage apparatus which writes and/or erases information by irradiating a light beam with respect to a target track on a recording medium, comprising the steps of:

(a) setting a write and/or erase power of the light beam with respect to the target track is located; and

(b) setting a write and/or erase slice level that is used to detect an external vibration or shock applied on the storage apparatus with respect to the target track depending on the write and/or erase power,

wherein said step (b) decreases the write and/or erase slice level depending on an increase of the write and/or erase power or, increases the write and/or erase slice level depending on a decrease of the write and/or erase power.

6. (Cancelled)

7. (Previously Presented) The write and/or erase method as claimed in claim 5, wherein said step (b) also sets an off-track detection time constant depending on the write and/or erase power.

8. (Previously Presented) The write and/or erase method as claimed in claim 5, wherein said step (b) also sets a shock detection time constant that is used to detect an external vibration or shock depending on the write and/or erase power.

9. (Currently Amended) A write and/or erase method for a storage apparatus which writes and/or erases information by irradiating a light beam with respect to a target track on recording medium, comprising the steps of:

(a) setting a write and/or erase power of the light beam with respect to the target track; and

(b) setting at least one parameter selected from write and/or erase parameters depending on the write and/or erase power, said write and/or erase parameters including a first write and/or erase slice level that is used to detect an off-track of the light beam with respect to the target track, an off-track detection time constant, a second write and/or erase slice level that is used to detect an external vibration or shock applied on the storage apparatus, and a shock detection time constant that is used to detect the external vibration or shock

wherein said step (b) decreases at least the first or second write and/or erase slice level depending on an increase of the write and/or erase power or, increases at least the first or second write and/or erase slice level depending on a decrease of the write and/or erase power, as the at least one parameter.

10. (Previously Presented) The write and/or erase method as claimed in claim 9, wherein a dependency with which the write parameters are set with respect to the write power is different from a dependency with which the erase parameters are set with respect to the erase power.

11. (Previously Presented) The write and/or erase method as claimed in claim 9, further comprising the step of:

(c) judging a type of the recording medium,
said step (b) being carried out when said step (c) judges that the recording medium is a high-density recording medium.

12. (Currently Amended) A storage apparatus which writes and/or erases information by irradiating a light beam with respect to a target track on a recording medium, comprising:

a first setting section configured to set a write and/or erase power of the light beam with respect to the target track; and

a second setting section configured to set a write and/or erase slice level that is used to detect an off-track of the light beam with respect to the target track depending on the write and/or erase power,

wherein said second setting section decreases the write and/or erase slice level depending on an increase of the write and/or erase power or, increases the write and/or erase slice level depending on a decrease of the write and/or erase power.

13. (Cancelled)

14. (Previously Presented) The storage apparatus as claimed in claim 12, wherein said second setting section also sets an off-track detection time constant depending on the write and/or erase power.

15. (Previously Presented) The storage apparatus as claimed in claim 12, wherein said second setting section also sets a shock detection time constant that is used to detect an external vibration or shock depending on the write and/or erase power.

16. (Currently Amended) A storage apparatus which writes and/or erases information by irradiating a light beam with respect to a target track on a recording medium, comprising:

a first setting section configured to set a write and/or erase power of the light beam with respect to the target track; and

a second setting section configured to set a write and/or erase slice level that is used to detect an external vibration or shock applied on the storage apparatus with respect to the target track depending on the write and/or erase power,

wherein said second setting section decreases the write and/or erase slice level depending on an increase of the write and/or erase power or, increases the write and/or erase slice level depending on a decrease of the write and/or erase power.

17. (Cancelled)

18. (Previously Presented) The storage apparatus as claimed in claim 16, wherein said second setting section also sets an off-track detection time constant depending on the write and/or erase power.

19. (Previously Presented) The storage apparatus as claimed in claim 16, wherein said second setting section also sets a shock detection time constant that is used to detect an external vibration or shock depending on the write and/or erase power.

20. (Currently Amended) A storage apparatus which writes and/or erases information by irradiating a light beam with respect to a target track on a recording medium, comprising:

a first setting section configured to set a write and/or erase power of the light beam with respect to the target track; and

a second setting section configured to set at least one parameter selected from write and/or erase parameters depending on the write and/or erase power, said write and/or erase parameters including a first write and/or erase slice level that is used to detect an off-track of the light beam with respect to a track on the recording medium, an off-track detection time constant, a second write and/or erase slice level that is used to detect an external vibration or shock applied on the storage apparatus, and a shock detection time constant that is used to detect the external vibration or shock,

wherein said second setting section decreases at least the first or second write and/or erase slice level depending on an increase of the write and/or erase power or, increases at least the first or second write and/or erase slice level depending on a decrease of the writer and/or erase power, as the at least one parameter.

21. (Previously Presented) The storage apparatus as claimed in claim 20, wherein a dependency with which the write parameters are set with respect to the write power is different from a dependency with which the erase parameters are set with respect to the erase power.

22. (Previously Presented) The storage apparatus as claimed in claim 20, further comprising:

a judging section configured to judge a type of the recording medium,

wherein said second setting section sets said at least one parameter when said judging section judges that the recording medium is a high-density recording medium.